STATE OF NEW HAMPSHIRE
BUILDING CODE REVIEW BOARD

PART Bcr 305 CHANGES OR UPDATES TO THE INTERNATIONAL MECHANICAL CODE 2009

Effective April 1, 2010

Bcr 305.01. International Mechanical Code 2009.

(a) Pursuant to RSA 155-A:10, V, the board hereby adopts the following changes and updates to the applicable provisions of the International Mechanical Code 2009.

(1) Amend section 101.1 of the International Mechanical Code 2009 by replacing said section with the following:

101.1 Title. These regulations shall be known as the *Mechanical Code* of the State of New Hampshire hereinafter referred to as "this code."

(2) Amend section 101.2 of the International Mechanical Code 2009 by replacing said section with the following:

101.2 Scope. This code shall regulate the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This code shall also regulate those mechanical systems, system components, equipment and appliances specifically addressed herein. Fuel gas systems shall comply with the New Hampshire Fire Code, Saf-C 6000 (NFPA 54).

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not having more than three stories high with separate means of egress and their accessory structures shall comply with the *International Residential Code*.

(3) Amend section 106.5.2 of the International Mechanical Code 2009 by replacing said section with the following:

106.5.2 Fee schedule. The fees for mechanical work shall be as determined by local jurisdiction.

(4) Amend section 106.5.3 of the International Mechanical Code 2009 by deleting said section.

(5) Amend section 108.4 of the International Mechanical Code 2009 by replacing said section with the following:

108.4 Violation penalties. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense

(6) Amend section 108.5 of the International Mechanical Code 2009 by replacing said section with the following:

108.5 Stop work orders. Upon notice from the code official that mechanical work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

(7) Amend section 607.5.4 of the International Mechanical Code 2009 by replacing said section with the following:

607.5.4 Corridors/smoke barriers. A listed smoke damper designed to resist the passage of smoke shall be provided at each point a duct or air transfer opening penetrates a smoke barrier wall or a corridor enclosure required to have smoke and draft control doors in accordance with the *International Building Code*. Smoke dampers and smoke damper actuation methods shall comply with Section 607.5.4.1.

Exceptions:

1. Smoke dampers are not required in corridor penetrations where the building is equipped throughout with an approved smoke control system in accordance with Section 513 and smoke dampers are not necessary for the operation and control of the system.
2. Smoke dampers are not required in smoke barrier penetrations where the openings in ducts are limited to a single smoke compartment and the ducts are constructed of steel.
3. Smoke dampers are not required in corridor penetrations where the duct is constructed of steel not less than 0.019 inch (0.48 mm) in thickness and there are no openings serving the corridor.
4. Fire and smoke dampers shall not be installed in laboratory fume hood exhaust systems.
5. Fire and smoke dampers shall not be installed in hazardous exhaust systems.

(8) Amend section 607.5.5 of the International Mechanical Code 2009 by replacing said section with the following:

607.5.5 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions:

1. Fire dampers are not required at penetrations of shafts where:
   1.1. Steel exhaust subducts extend at least 22 inches (559 mm) vertically in exhaust shafts provided that there is a continuous airflow upward to the outdoors; or
   1.2. Penetrations are tested in accordance with ASTM E 119 or UL 263 as part of the fire-resistance-rated assembly; or
   1.3. Ducts are used as part of an approved smoke control system in accordance with Section 909 of the *International Building Code*, and where the fire damper will interfere with the operation of the smoke control system; or
   1.4. The penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.
2. In Group B and R occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Building Code*, smoke dampers are not required at
penetrations of shafts where kitchen, clothes dryer, bathroom and toilet room exhaust openings with steel exhaust subducts, having a minimum
thickness of 0.0187 inch (0.4712 mm) (No. 26 gauge), extend at least 22 inches (559 mm) vertically and the exhaust fan at the upper terminus is powered continuously in accordance with the provisions of Section 909.11 of the *International Building Code*, and maintains airflow upward to the outdoors.
3. Smoke dampers are not required at penetrations of exhaust or supply shafts in parking garages that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.
4. Smoke dampers are not required at penetrations of shafts where ducts are used as part of an approved mechanical smoke control system designed in accordance with Section 909 of the *International Building Code* and where the smoke damper will interfere with the operation of the smoke control system.
5. Fire dampers and combination fire/smoke dampers are not required in kitchen and clothes dryer exhaust systems installed in accordance with this code.
6. Fire and smoke dampers shall not be installed in laboratory fume hood exhaust systems.
7. Fire and smoke dampers shall not be installed in hazardous exhaust systems.

(9) Amend section 606.2 of the International Mechanic Code 2009 by replacing said section with the following:

606.2 Where required. Smoke detectors shall be installed where indicated in Sections 606.2.1 through 606.2.~~3~~4.

Exception: Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated.

606.2.1 Location of smoke detectors. Smoke detectors shall be installed downstream of the air filters and ahead of any branch connections in air supply systems with a design capacity greater than 2,000 cfm (0.9 m^3/s).

606.2.2 Return air systems. Smoke detectors shall be installed in return air systems with a design capacity greater than 2,000 cfm (0.9 m3/s), in the return air duct or plenum upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances.

Exception: Smoke detectors are not required in the return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the *International Fire Code*. The area smoke detection system shall comply with Section 606.4.

606.2.3 Common supply and return air systems. Where multiple air-handling systems share common supply or return air ducts or plenums with a combined design capacity greater than 2,000 cfm (0.9 m^3/s), the return air system shall be provided with smoke detectors in accordance with Section 606.2.1 and 606.2.2.

Exception: Individual smoke detectors shall not be required for each fan-powered terminal unit, provided that such units do not have an individual design capacity greater than 2,000 cfm (0.9 m3/s) and will be shut down by activation of one of the following:

1. Smoke detectors required by Sections 606.2.1, 606.2.2 and 606.2.~~3~~4.
2. An approved area smoke detector system located in the return air *plenum* serving such units.
3. An area smoke detector system as prescribed in the exception to Section 606.2.~~1~~2. In all cases, the smoke detectors shall comply with Sections 606.4 and 606.4.1.

606.2.4 Return air risers. Where return air risers serve two or more stories and serve any portion of a return air system having a design capacity greater than 15,000 cfm (7.1 m^3/s), smoke detectors shall be installed at each story. Such smoke detectors shall be located upstream of the connection between the return air riser and any air ducts or plenums.

(10) Amend section 1002.2.2 of the International Mechanic Code 2009 by replacing said section with the following:

1002.2.2 Temperature limitation. Where a combination potable water-heating and space-heating system requires water for space heating at temperatures higher than 130°F (55°C), a temperature actuated mixing valve that conforms to ASSE 1017 shall be provided to temper the water supplied to the potable hot water distribution system to a temperature of 130°F (55°C) or less.

(11) Amend section 1002.4 of the International Mechanic Code 2009 by replacing said section with the following:

1002.4 Water temperature at faucets. Water temperature shall be limited to 130°F (55°C) at faucets used for personal and domestic hygiene. This shall not effect other water temperature requirements in this code.